Before the Public Utilities Commission of the State of California

Order Instituting Rulemaking to Examine the Commission's Future Energy Efficiency Policies, Administration, and Programs.	R.01-08-028 Filed August 23, 2001

TRC Recalculations for the ENERGY STAR® CFL Program for Small Hardware and Grocery Retailers as Adjusted by the Draft Decision for Local Energy Efficiency Programs, R. 01-08-028

by

Ecos Consulting, Inc.

Dated May 1, 2002

Submitted by:
My K. Ton
Ecos Consulting, Inc.
208 SW Stark, Suite 400
Portland, OR 97204
(503) 525-2700 ext. 104
ton@ecosconsulting.com

Certificate of Service

I, the undersigned, state that I am a citizen of the United States and am employed in the City of Portland, Oregon and County of Multnomah; that I am over the age of eighteen years; and that my business address is Ecos Consulting, Inc., 208 SW Stark, Suite 400, Portland, OR 97204. I also state that I am a Vice President of Ecos Consulting.

On the 1st day of May 2002, I served a signed original copy and five additional copies of a document entitled: "TRC Recalculations for the ENERGY STAR® CFL Program for Small Hardware and Grocery Retailers as Adjusted by the Draft Decision for Energy Efficiency Programs, R. 01-08-028" via Federal Express to the Docket Office with a copy to ALJ Thomas and Commissioner Lynch and via electronic mail to those same parties and all other parties on the service list for this proceeding.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 1st day of May 2002.

My K. Ton
Vice President
Ecos Consulting, Inc.
208 SW Stark, Suite 400
Portland, OR 97204
(503) 525-2700 ext. 104
(503) 525-4800 fax
ton@ecosconsulting.com

cc: Assigned Commissioner Loretta Lynch
The CPUC Docket Office
All parties of record R. 01-08-028

Introduction

In the Draft Decision for the Energy Efficiency Program Selection per R.01-08-028, Ecos Consulting was awarded the "ENERGY STAR® CFL Program for Small Hardware and Grocery Retailers" (Hardware and Grocery Program) with some modifications. The Program was selected to run in both the service territories of Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E). This adjustment to the Program (reduction of territory covered by the Program) created a change in the total budget and a change in the TRC calculations. The revised Program has a TRC Test ratio of 1.28 and a Participant Test ratio of 2.38.

The revised TRC calculations are included in a spreadsheet provided with this document. Below is an explanation of the numerical data provided by Ecos for these tests.

Explanation of Numerical Data

1. Program Benefits Calculations

Number of Units

To determine the number of units appropriate for the Hardware and Grocery Program Ecos used a combination of research with industry partners and information collected over our five years of experience in implementing market-based CFL programs. Ecos spoke with several CFL manufacturers to obtain estimates for potential CFL sales in the targeted California hardware and grocery channel. We compared these estimates with actual units moved through similar programs in the Pacific Northwest to develop our final unit estimates.

Annual kWh Savings per Unit

To calculate the kWh savings, Ecos gathered information on the annual kWh consumption of CFLs, the annual kWh consumption of equivalent incandescent bulbs, the average hours of use per day and the measure lifetime. We utilized the Commission's specified Net-to-Gross Ratio of 0.8 to adjust for free riders. The program is designed to focus on a mix of CFL sizes including 15W and 25W. The data for determining the energy savings benefits are shown below.

	Average Use per Day (Hours)	Annual kWh Base	Annual kWh New	Annual kWh Savings	Measure Lifetime (Years)	Incremental Measure Cost
CFL – 15W	2.5	60.6	15.1	45.5	5	$10
CFL – 25 W	2.5	101	25.2	75.8	5	$10

Specifically, the Average Use per Day, Annual kWh Base, Annual kWh New and Incremental Measure Cost are from the 2001 DEER Update Study, August 2001, Section 6-2. The ENERGY STAR program requires a rated lifetime for CFLs of 6,000 hours. Usage of 2.5 hours/day would imply a lifetime of about 6 ½ years. Philips guarantees their CFLs for 5 years. Ecos utilized 5 years in order to be somewhat conservative with our estimates.

Effective Useful Life (EUL)

In the *Energy Efficiency Policy Manual* (Attachment 1 to the *Interim Decision Adopting Energy Efficiency Policy Rules*) the CPUC directed all bidders to use the Effective Useful Lives (EUL) of Energy Efficiency Measures provided in the documentation for those measures listed. If the product was not listed, the bidder was instructed to propose an appropriate assumption for the EUL. The provided list did not include the screw-based CFLs targeted in by the Hardware and Grocery Program. As mentioned above, Ecos chose to take a conservative estimate on CFL lifetime based on our research with manufacturers and experience with the ENERGY STAR Program. The EUL used in our calculations is 5 years.

Net-to-Gross Ratio

In the *Energy Efficiency Policy Manual* (Attachment 1 to the *Interim Decision Adopting Energy Efficiency Policy Rules*) the CPUC directed all bidders to use the Net-to-Gross Ratio (NTGR) for applicable programs provided in the documentation for those measures listed. For those not listed, the CPUC requested that applicants use the default NTGR of 0.8. The Hardware and Grocery Program did not fit into the provided measures; therefore, Ecos used the default data point of 0.8.

2. Non-Administrator Costs Calculations

Total Rebate/Financial Incentive per Unit

Based on our work in California and the Pacific Northwest on similar cooperative marketing programs, Ecos estimates incentive levels to average approximately $5 per unit. To effectively target hard-to-reach customers, Ecos has designed a flexible incentive program. Thus, per unit incentives may vary and may be used for marketing and promotional activities in addition to price discounts. On average, however, we anticipate a program expenditure of $5 per CFL.

Gross Incremental Measure Cost per Unit

For the Gross Incremental Measure Cost per Unit, Ecos assembled a variety of data to develop the $10 figure used in our calculations. This data included store visits, our work with the California Residential Lighting and Appliance Program (CRLAP), and the DEER study referenced above. From store visits we determined that, on average, a CFL could be purchased for $8.99 and an incandescent for $0.25. For the CRLAP program, the utilities used $9 for this input. The DEER study offers several data points, but none that fits the Hardware and Grocery Program. In Section 4, equipment costs for commercial CFLs range from $5.90 to $10. In the residential portion of the study only one figure was provided. This figure was a cost of $14 for CFLs installed for low-income locations. We reviewed the above data and determined that $10 was an accurate estimate for the needs of this test.